APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,769	05/03/2001	Michael T. Loos	26625-705	6637

21971 7590 01/14/2005		

WILSON SONSINI GOODRICH & ROSATI
650 PAGE MILL ROAD
PALO ALTO, CA 943041050

EXAMINER
CHANG, JUNGWON

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/848,769	LOOS ET AL.
	Examiner	**Art Unit**	
	Jungwon Chang	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>*02 July 2001*</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-37* is/are pending in the application.

 4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-37* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a) ☐ All b) ☐ Some * c) ☐ None of:

 1. ☐ Certified copies of the priority documents have been received.

 2. ☐ Certified copies of the priority documents have been received in Application No. _____.

 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-37 are presented for examination.

2.   It is noted that although claims contain line numbers, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim with each claim beginning with line 1. For ease of reference by both examiner and applicant all future correspondence should include the recommended line numbering.

3.   Claims 1 and 12 is objected to because the following informalities:

Line 1, "the system comprising:" should be "the method comprising:"

Appropriate correction is required.

4.   Claim 29 is objected to because the following informalities:

Lines 7-8, "the integration server, the integration server" should be "the integration server". Appropriate correction is required.

5.   Claim 34 is objected to because the following informalities:

Line 4, "operable to operable to" should be "operable to".

Appropriate correction is required.

6.   Claim 37 is objected to because the following informalities:

Line 2, "the communication link" should be "the wireless communication link".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   Claims 1-5, 10-16, 19-23, 25-28, 30-37 are rejected under 35 U.S.C. 102(e) as

being anticipated by Carini et al. (US 6,636,873), hereinafter referred to as Carini.

9.   As to claim 1, Carini discloses the invention as claimed, a method for extending

enterprise data to a mobile device (col. 1, lines 9-11; col. 2, lines 31-40; col. 3, lines 10-

14), the system comprising:

        creating a domain data store (database; 420, fig. 4) comprised of data relating to

an enterprise system (enterprise database; 404, fig. 4) (col. 5, lines 26-30; col. 6, lines

12-20 and 26-30);

        establishing a communication link (416, fig. 4; col. 5, lines 30-34) with a mobile

computing device (408, 410, 412, 414, fig. 4; col. 5, lines 11-16) (figs. 4-5; col. 5, lines

26-34), the mobile computing device including a mobile data store (604, 606, 607, fig. 6;

col. 10, lines 20-32) comprised of at least a portion of the data (col. 2, lines 9-12; col. 2,

line 58 – col. 3, line 5; col. 5, lines 26-30; col. 6, lines 42-66);

receiving transactions from the mobile computing device (col. 3, lines 21-30; col.

5, lines 45-49), the transactions comprising at least partially data operations performed

on the mobile data store prior to the communication link being established (in a

disconnected mode; col. 7, lines 21-29; col. 8, lines 53-57; col. 10, lines 4-6);

modifying the domain data store to reflect the transactions (col. 5, lines 45-49;

col. 6, lines 49-52); and

communicating a portion of the domain data store to the enterprise system (col.

5, lines 26-34; col. 6, lines 26-30 and 61-66; col. 7, lines 35-41; col. 9, lines 29-33).

10.   As to claim 2, Carini discloses transmitting over a wireless communication link

(wireless channel; col. 3, lines 56-58; col. 12, lines 3-6) an application to the mobile

computing device (col. 9, lines 48-67), the application operable to create the mobile

data store on the mobile computing device (col. 10, lines 20-32 and 50-59).

11.   As to claim 3, Carini discloses receiving updates to the data from the enterprise

system (col. 6, lines 58-61); modifying the domain data store to reflect the updates (col.

5, lines 26-30; col. 6, lines 26-35; col. 9, lines 29-33); and transmitting at least a portion

of the domain data store to the mobile computing device (col. 6, lines 58-61).

12.   As to claim 4, Carini discloses determining the portion of the domain data store to be transmitted to the mobile computing device based upon characteristics of the mobile computing device (limited memory, data processing capabilities; col. 1, line 53 – col. 2, line 8; col. 3, lines 21-30; col. 5, lines 38-45).

13.   As to claim 5, Carini discloses determining the portion to be transmitted to the mobile computing device based upon an identity of a user of the mobile computing device (MD1-MD5, fig. 5; synchronization log is kept of all transactions for each of the mobile devices, MD1-MD5; col. 6, lines 42-66).

14.   As to claim 10, Carini discloses authenticating a user of the mobile computing device prior to the modifying step (secure socket layer protocol; col. 8, lines 43-45).

15.   As to claim 11, Carini discloses the communication link is a wireless communication link (wireless channel; col. 3, lines 56-58; col. 12, lines 3-6).

16.   As to claim 12, it is rejected for the same reasons set forth in claim 1 above. In addition, Carini discloses establishing a wireless communication link (wireless channel; col. 3, lines 56-58; col. 12, lines 3-6) with a mobile computing device (408, 410, 412, 414, fig. 4; col. 5, lines 11-16) (figs. 4-5; col. 5, lines 26-34);

       synchronizing the mobile data store with the domain data store (col. 5, lines 38-49; col. 6, lines 42-61);

modifying the domain data store to reflect the synchronization (col. 5, lines 45-49;

col. 6, lines 49-52).

17.   As to claim 13, Carini discloses receiving transactions from the mobile computing

device (col. 3, lines 21-30; col. 5, lines 45-49), the transactions comprising at least

partially data operations performed on the mobile data store prior to the communication

link being established (in a disconnected mode; col. 7, lines 21-29; col. 8, lines 53-57;

col. 10, lines 4-6).

18.   As to claim 14, it is rejected for the same reasons set forth in claim 3 above.

19.   As to claim 15, it is rejected for the same reasons set forth in claim 4 above.

20.   As to claim 16, it is rejected for the same reasons set forth in claim 5 above.

21.   As to claim 19, it is rejected for the same reasons set forth in claim 11 above.

22.   As to claim 20, Carini discloses a method for accessing enterprise data from a

mobile device (col. 1, lines 9-11; col. 2, lines 31-40; col. 3, lines 10-14), comprising:

        storing a mobile data store (604, 606, 607, fig. 6; col. 10, lines 20-32), the mobile

data store comprised of at least a portion of data from an enterprise system (enterprise

database; 404, fig. 4) (col. 2, lines 28-40; col. 2, line 58 – col. 3, line 5; col. 5, lines 26-

30; col. 6, lines 42-66);

creating transactions comprising data operations performed on the mobile data

store (col. 2, lines 9-12; data residing on the mobile device; col. 2, lines 28-30; mobile

device data; col. 3, lines 22-23; col. 7, lines 21-29; col. 8, lines 53-57; col. 10, lines 4-6);

establishing a communication link (416, fig. 4; col. 5, lines 30-34) after creating

the transactions with a mobile application server (402, fig. 4) (fig. 4; col. 5, lines 7-16

and 34-38), wherein the mobile application server (402, fig. 4) interfaces to a domain

data store (420, fig. 4; col. 5, lines 24-25) separate from the enterprise system (404, fig.

4); and

transmitting the transactions to the domain data store (col. 3, lines 21-30; col. 4,

lines 13-14; col. 5, lines 45-49; col. 7, lines 21-29).

23.   As to claim 21, it is rejected for the same reasons set forth in claim 11 above.

24.   As to claim 22, it is rejected for the same reasons set forth in claim 2 above.

25.   As to claim 23, Carini discloses receiving updates to the data from the domain

data store (col. 5, lines 45-49); and modifying the mobile data store to reflect the

updates (col. 2, lines 31-40; col. 6, lines 56-57).

26.   As to claim 25, it is rejected for the same reasons set forth in claim 10 above.

27.   As to claim 26, Carini discloses signaling to the mobile application server that the

mobile device is available for wireless communication (request for connection; col. 7,

lines 7-20).

28.   As to claim 27, it is rejected for the same reasons set forth in claims 1, 12 and 20

above. In addition, Carini discloses a mobile application server (402, fig. 4) operable to

interface to an enterprise system (enterprise database; 404, fig. 4) and a mobile

computing device (408, 410, 412, 414, fig. 4; col. 5, lines 11-16) (fig. 4); and

        a domain data store (420, fig. 4) communicatively coupled to the mobile

application server (fig. 4; col. 5, lines 24-25), the domain data store operable to store

data from the enterprise system (col. 6, lines 46-49; col. 9, lines 29-33);

        wherein the mobile application server is operable to:

                establish a communication link with a mobile computing device (fig. 4; col.

5, lines 7-16 and 34-38);

                receive transactions from the mobile computing device (col. 3, lines 21-30;

col. 5, lines 45-49), the transactions comprising at least partially data operations

performed on the mobile data store prior to establishment of a wireless communication

link (in a disconnected mode; col. 7, lines 21-29; col. 8, lines 53-57).

29.   As to claim 28, Carini discloses the mobile application server comprises

executable code stored on a single computing platform (col. 8, lines 40-49).

30.   As to claim 30, it is rejected for the same reasons set forth in claim 20 above. In addition, Carini discloses a computer readable medium (database, memory, storage; 404, 420, figs. 4-5; 604-607, fig. 6); application stored on the computer readable medium (col. 9, lines 43-67; col. 10, lines 20-32 and 50-59).

31.   As to claim 31, it is rejected for the same reasons set forth in claim 11 above.

32.   As to claim 32, it is rejected for the same reasons set forth in claim 30 above. In addition, Carini discloses a colonist (program) stored on the mobile computing device (col. 10, lines 20-32 and 50-59); receive an application (col. 9, lines 48-67), the application executable to form a mobile data store (storing information and instructions to be executed by processor; col. 10, lines 20-32 and 43-59).

33.   As to claim 33, it is rejected for the same reasons set forth in claim 11 above.

34.   As to claim 34, it is rejected for the same reasons set forth in claims 27 and 30 above. In addition, Carini discloses a mobile application server (402, fig. 4) stored on the computer readable medium (420, 422, fig. 4), the mobile application server operable to interface to an enterprise system (enterprise database; 404, fig. 4), a domain data store (420, fig. 4), and a mobile computing device (408, 410, 412, 414, fig. 4; col. 5, lines 11-16) (figs. 4-5).

35.   As to claim 35, it is rejected for the same reasons set forth in claims 27 and 30

above. In addition, Carini discloses wherein the mobile application server (402, fig. 4) is

operable to transmit the portion over a wireless communication link based upon

characteristics of the mobile computing device (limited memory, data processing

capabilities; col. 1, line 53 – col. 2, line 8; col. 3, lines 21-30; col. 5, lines 38-45).

36.   As to claim 36, Carini discloses wherein the portion is created prior to an

establishment of a wireless communication link between the mobile application server

and the mobile computing device (in a disconnected mode; col. 7, lines 21-29; col. 8,

lines 53-57).

37.   As to claim 37, Carini discloses the portion is created by pre-processing data

from the enterprise system in anticipation of the establishment of the communication

link (col. 6, lines 58-61; col. 7, lines 41-54).

Claim Rejections - 35 USC § 103

38.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

39.   Claims 6-9, 17, 18 and 24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Carini et al. (US 6,636,873), in view of Hertzog et al. (2003/0069874),

hereinafter referred to as Hertzog.

40.   As to claims 6-9, 17, 18 and 24, Carini does not specifically disclose

synchronizing step is performed periodically, at regular time intervals, or on interrupt

basis. However, Hertzog discloses the synchronizing step is performed periodically, at

regular time intervals, or on interrupt basis (both these local and global synchronization

operations may be initiated by the client application at regular, periodic intervals; page

4, [0051], [0055]; local database is required to be periodically synchronized with the

information within the server database; page 6, [0075]; page 21, [0229]). It would have

been obvious to one of ordinary skill in the art at the time the invention was made to

combine the teachings of Carini and Hertzog because Hertzog's predetermined time

interval for synchronizing would improve backup and recovery performance in the event

of failure by periodically updating both databases to reflect changes that have been

made in one database in the other.

41.   As to claim 7, Carini discloses modifying the domain data store to reflect changes

in the data initiated by the enterprise system (col. 5, lines 26-30; col. 6, lines 26-35 and

61-66; col. 9, lines 29-33); and modifying the data on the enterprise system to reflect

changes in the domain data store (col. 5, lines 26-30; col. 6, lines 26-35; col. 7, lines 35-

41; col. 9, lines 29-33).

42.   Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carini et al. (US 6,636,873), in view of Devine et al. (2003/0041263), hereinafter referred to as Devine.

43.   As to claim 29, Carini does not specifically disclose primary server, an integration server communicatively coupled to the primary server and interfacing to the enterprise system; a connection server communicatively coupled to the primary server and interfacing to the mobile computing device; and a data management server communicatively coupled to the primary server, the integration server and the domain data store. Devine discloses primary server (24, fig. 4), an integration server (46, fig. 4) communicatively coupled to the primary server (24, fig. 4) and interfacing to the enterprise system (page 5, [0070], lines 5-9); a connection server (45, fig. 4) communicatively coupled to the primary server (24, fig. 4) and interfacing to the mobile computing device (107, fig. 4); and a data management server (42, fig. 4; page 5, [0069], lines 9-11) communicatively coupled to the primary server (24, fig. 4), the integration server (46, fig. 4) and the domain data store (32, fig. 4; page 10, [0122]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Carini and Devine because Devine's a plurality of servers would increase the capability of Carini's system by adding the multiple functionality of servers, thereby improving the customer service by more rapidly

distributing desired resources to the user of the mobile device.

Conclusion

44.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

Wright, Jr. et al, US 6,324,542, Loos et al, 2002/0033843, Hiscock, US 6,721,787, Lurie

et al, 2002/0116698, Wright, Jr. et al, US 5,857,201, Huang et al, US 6,829,655, Pollard

et al, US 6,549,917 disclose a method and system for synchronization of enterprise

system and handheld remote computers.

45.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jungwon Chang whose telephone number is 571-272-

3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John A Follansbee can be reached on 571-272-3964. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

        Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JWC
January 10, 2005